

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028033**Date Inspected:** 22-Jul-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG/Tower**Summary of Items Observed:**

At the start of the shift this Quality Assurance Lead Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Joselito Lizardo-OBG W12 and W13 Drop-In Assemblies (Observation of excavations, repair welding, production welding, QC inspection and testing).

Doug Frey-OBG E12 and E13 Drop-In Assemblies (Observations of welding, fit-up and QC inspection of the field splices).

William Clifford-OBG W5 (VT, MPT and UT Verification), OBG E12 and E13 Drop-In Assemblies (Observation of welding, QC inspection and testing).

Fritz Belford-OBG W12 Drop-In Assembly (Observation of welding, QC inspection and testing) and W13 Drop-In Assembly (VT, MPT and UT Verification).

NOTE: See QA daily Weld Inspection Reports (WIR) and NDE reports for additional information and details.

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Quality Assurance Lead Inspector (QALI) Summary

This QA Lead Inspector (QALI) observed the QA Inspector's Joselito Lizardo, William Clifford, Doug Frey and Fritz Belford monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues were noted during this shift.

This QA Lead Inspector commence the review of NDT reports, tracking of welding and developing and generating weld maps for W13 drop-in panels, E12 and W12 corner drop-in assemblies. This QA Lead Inspector also reviewed RWR documents for tracking purposes.

OBG W2

The QALI observed the Shielded Metal Arc Welding (SMAW) of the Deck Access Hole (DAH) plate identified as Weld Number (WN): 2W-PP13.5 located on the "A" deck of the Orthotropic Box Girder (OBG) E1. The welder Roby Smith ID-4245 performed the welding of the root of the Complete Joint Penetration (CJP) utilizing the Welding Procedure Specification (WPS) ABF-WPS-D15-1010A, Rev. 1. The WPS was also utilized by the QC inspector John Pagliero as a reference to monitor the welding and verify the Direct Current Electrode Positive (DCEP) welding parameters which appeared to comply with the contract specifications. The 3.2 and 4.0 mm Lincoln electrodes were utilized with the welding performed in the flat (1G) position with the work placed in an approximately horizontal plane and the weld metal deposited from the upper side. The groove joint appeared to comply with the AWS joint designation identified as B-U3b. The minimum preheat temperature of 20 degrees Celsius and the maximum interpass temperature of 230 degrees Celsius were verified by the QC inspector.

Summary of Conversations:

At the start of the shift, there were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

Also, there were pertinent conversations with QA Supervisor, William Levell, through the course of this shift in regards to scheduling of QA personnel, work progress and related structural steel and weld issues. There were no significant issues noted on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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Inspected By: Reyes,Danny

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer